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## PATENT ABSTRACTS OF JAPAN

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### **(54) METHOD FOR MOLDING SPINDLE HOUSING**

(57) Abstract:

**PURPOSE:** To prevent the dispersion of an assembling width dimension generated during embedding ball bearings into the resin by previously integrating the ball bearings within a metal die and injecting resin while giving a pre-load thereto.

**CONSTITUTION:** Ball bearings 14 are fittedly inserted into the base end side of a protrusive shaft part 41 of the second die 40. The first die 30 is mounted as an arrow to the secondWthird dies 40W50. The second die 40 is depressed downwards along the piercing hole 51 of the third die 50 against the spring force of a spring 44. The second die 40 is urged to the direction of being pushed up to the side of the first die 30 by the repulsive force of the spring 44, therefore, the ball bearings result also in its being given the pre-load of a shaft direction. Under this conditions, the resin is injected from a resin injection path 55 into the cavity defined by the annular flat surfaces 33, 34 of the first die 30, small diameter cylindrical part 42 of

the second die 40 and the recess parts 52, 53 of the third die 50. The housing not having any dispersion in the assembling width dimension integrated with the ball bearings 14 can therefore be obtained.

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